ORGANIZATION: City of Sherwood DATE: Oct 2016

LOCATION: Sherwood, Oregon Administration

**DEPARTMENT**: Information Technology

FLSA STATUS: Exempt

JOB TITLE: Senior Network Engineer – Pay Group G

# **PURPOSE OF POSITION:**

Primary support to the City's telecommunication utility, Sherwood Broadband, including administering and supporting core, edge, and client equipment. Perform a variety of senior level network administration duties, analysis and support in the administration of Local and Wide Area Networks including hardware, software, security and other related applications and services. Provide 24/7 troubleshooting and support for client outages and issues including the coordinating of physical plant repair. Maintain system documentation including field verifying physical assets and taking appropriate measures to insure their protection. Additionally, perform the same/similar networking duties for the City of Sherwood.

# **ESSENTIAL JOB FUNCTIONS:**

Responsible for the operations and maintenance of all Sherwood Broadband and City of Sherwood networks. Act as the Senior Network Engineer, performing analysis on current and future systems as to ensure proper functioning, security and performance. Analyze, plan, deploy, and document future systems and upgrades.

Install, upgrade and maintain network servers, routers, switches, firewalls and other network components. Install new hardware and software to support the network, monitor network traffic and health using various tools. Perform 24/7 troubleshooting to resolve problems related to the network and/or customer connections.

Act as the primary network security professional, ensuring all networks systems are implemented and operating with the strictest security controls and measures. Perform network monitoring, security scans and troubleshooting when necessary. Work with other IT staff and their security related projects to ensure consistency in all security operations.

Identify needs for networking. Research and recommend appropriate networking systems, participate in coordination and implementation of networking systems.

Perform support activities associated with server and software installation, configuration, maintenance and connectivity. Inspect and repair network wiring, servers, switches, routers and systems.

Provide 24/7 response and troubleshooting of fiber optic related outages, and coordinate the repair of City/Broadband owned facilities. Work with partner service providers and customers to troubleshoot network issues and inform them of service disruptions and planned outages.

Work in the field to inspect, verify, document, and protect City owned facilities; including making site visits to Sherwood Broadband customer sites and city facilities. Perform fiber splicing/termination in both indoor and outdoor facilities. Assist with small fiber optic installations including pulling fiber into vaults/buildings and installing fiber optic structures.

Participate in team efforts to define, review and refine procedures for the maintenance of stable network operations, secure network environment, and overall IT operations

Coordinate the work of a project team; guide and formulate project needs and requirements; manage and complete projects within specific time and budget constraints.

Assist other IT staff with projects. Perform end user support on the various systems the IT department is responsible for.

Provide excellence in internal and external customer service. Create a positive experience for customers through professional and courteous behavior and creative problem resolution.

Maintain cooperative working relationships with City staff, customers, other organizations and the general public.

### **AUXILIARY JOB FUNCTIONS:**

Provide assistance to other staff as workload and staffing levels dictate. Maintain proficiency by attending training and meetings, reading materials, and meeting with others in areas of responsibility. Maintain work areas in a clean and orderly manner.

Assist IT Manager with management of tasks as needed.

# JOB QUALIFICATION REQUIREMENTS:

### MANDATORY REQUIREMENTS:

Ability to respond 24/7 to network outages. Advanced knowledge and skills in the administration of computer networks, including switching, routing, firewalls, intrusion detection systems, etc. Advanced experience and understanding of layer 2/3 protocols including BGP. Experience working with fiber optic systems in a Carrier/Service Provider environment. Ability to work on fiber optic structures in the field. Advanced knowledge of computer network, and security systems, and their associated software. Understanding of best practices around systems configuration, with a focus on security, reliability, and scalability. Equivalent to a four-year university education in computer science or management information science and over five years' experience, or any satisfactory combination of experience and training which demonstrates the knowledge, skills and abilities to perform the above duties.

#### **DESIRABLE REQUIREMENTS:**

Cisco, CCNA or CCNP Certification. Experience in a service provider environment including outside plant maintenance; experience with fiber optic cabling; Windows and Linux server administration.

### PHYSICAL DEMANDS OF POSITION:

While performing the duties of this position, the employee is frequently required to sit, stand, bend, kneel, stoop, communicate, reach and manipulate objects. The position requires mobility. Duties involve moving materials weighing up to 10 pounds on a regular basis such as files, books, office equipment, etc., and may infrequently require moving materials weighing up to 50 pounds. Manual dexterity and coordination are required over 50% of the work period while operating equipment such as computer keyboard, calculator, and standard office equipment.

# **WORKING CONDITIONS:**

Usual office working conditions. The noise level in the work area is typical of most office environments with telephones, personal interruptions, and background noises. Attendance at meetings requires working after normal business hours.

## **SUPERVISORY RESPONSIBILITIES:**

May be responsible for supervising 1 to 2 FTE depending on area of assignment. Oversee contracts and programs as needed. May provide training and orientation to volunteers, students and newly assigned personnel on site policies and practices.

# SUPERVISION RECEIVED:

Works under the direction of the IT Director.